

In the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A method of producing a packet group for use in a trace stream of packets, ~~the packet group~~ comprising:
providing at least one header packet within the packet group;
and

arranging at least one plurality of further packets to form a
corresponding at least one packet subgroup within the packet
group[,];

wherein each of said further packets having has an extension portion and a payload portion, ~~the number of packet subgroups determined by~~ wherein a field in the at least one header packet indicates a number of packet subgroups provided in the packet group, wherein ~~the~~ a first of said further packets in each packet subgroup includes a first said extension portion, ~~the~~ wherein a remainder of said further packets following the first packet in said at least one packet subgroup that and are a continuation of content contained in the first ~~subgroup~~ packet, and wherein each of said remainder of said further packets having has a second said extension portion that differs from said first extension portion.

2. (Currently Amended) The ~~packet group~~ method as recited in

claim 1 wherein[,] said packet group ends when ~~in the sequence of packets~~ a next packet of the trace stream that immediately follows a packet of the last packet subgroup ~~of patents,~~ ~~the next sequential packet~~ does not have the second extension portion, ~~the packet group has ended.~~

3. (Currently Amended) The ~~packet group~~ method as recited in claim 2 wherein ~~the~~ said next ~~sequential~~ packet begins a new packet group.

4. (Currently Amended) The ~~packet group~~ method as recited in claim [3] 1 wherein ~~for selected packet groups,~~ said number of packet subgroups, together with said first and second extension portions, permit identification of a position in the trace stream that is associated with an implied [a] header packet ~~is implied for new~~ corresponding to an immediately following packet group[s].

5. (Canceled)

6. (Currently Amended) A processor test and debug system, the system comprising:

a host processing unit; and

a target processor, the target processor transmitting trace streams of packets to the host processing unit, the trace streams

permitting the host processing unit to reconstruct the operation of the target processing unit, at least one of the trace streams ~~being~~ ~~comprised of~~ comprising a sequence of packet groups, each said packet group including:

at least one header packet; and

at least one packet subgroup containing a plurality of further packets[,];

wherein each of said further packets ~~having~~ has an extension portion and a payload portion, ~~the number of packet subgroups determined by~~ wherein a field in the at least one header packet indicates a number of packet subgroups provided in the associated packet group, wherein ~~the~~ a first of said further packets ~~in each packet subgroup~~ includes a first said extension portion, wherein a remainder of said further ~~the~~ packets following the first packet in said at least one packet subgroup ~~that~~ and are a continuation of content contained in the first ~~subgroup~~ packet, and wherein each of said remainder of said further packets ~~having~~ has a second said extension portion that differs from said first extension portion.

7. (Currently Amended) The ~~packet-group~~ system as recited in claim 6 wherein[,] one of said packet groups ends when ~~in the sequence of packets~~ a next packet of said at least one trace stream that immediately follows a packet of the last packet subgroup ~~of~~ ~~patents~~, ~~the next sequential packet~~ within said one packet group

does not have the second extension portion, ~~the packet group has ended.~~

8. (Currently Amended) The ~~packet group~~ system as recited in claim 7 wherein ~~the~~ said next ~~sequential~~ packet begins a new packet group.

9. (Currently Amended) The A method for transferring information from a target processor to a host processing unit in a trace stream[s] of packets, the method comprising:

dividing the ~~information~~ packets into packet groups;

formatting each packet group to include at least one header packet; and

formatting ~~the~~ each packet group to include at least one packet subgroup containing a plurality of further packets[,];

wherein each of said further packets ~~having~~ has an extension portion and a payload portion, ~~the number of packet subgroups determined by~~ wherein a field in the at least one header packet indicates a number of packet subgroups provided in the associated packet group, wherein ~~the~~ a first of said further packets ~~in each packet subgroup~~ includes a first said extension portion, ~~the~~ wherein a remainder of said further packets following the first packet in said at least one packet subgroup ~~that~~ and are a continuation of content contained in the first subgroup packet, and

wherein each of said remainder of said further packets having has a second said extension portion that differs from said first extension portion.

10. (Currently Amended) The method as recited in claim 9 wherein[,] each said packet group ends when ~~in the sequence of packets~~ a next packet of the trace stream that immediately follows a packet of the last packet subgroup ~~of patents, the next sequential packet~~ does not have the second extension portion, ~~the packet group has ended.~~

11. (New) The method as recited in claim 9 wherein, with respect to each said packet group, the corresponding said number of packet subgroups, together with said first and second extension portions, permit identification of a position in the trace stream that is associated with an implied header packet corresponding to an immediately following packet group.